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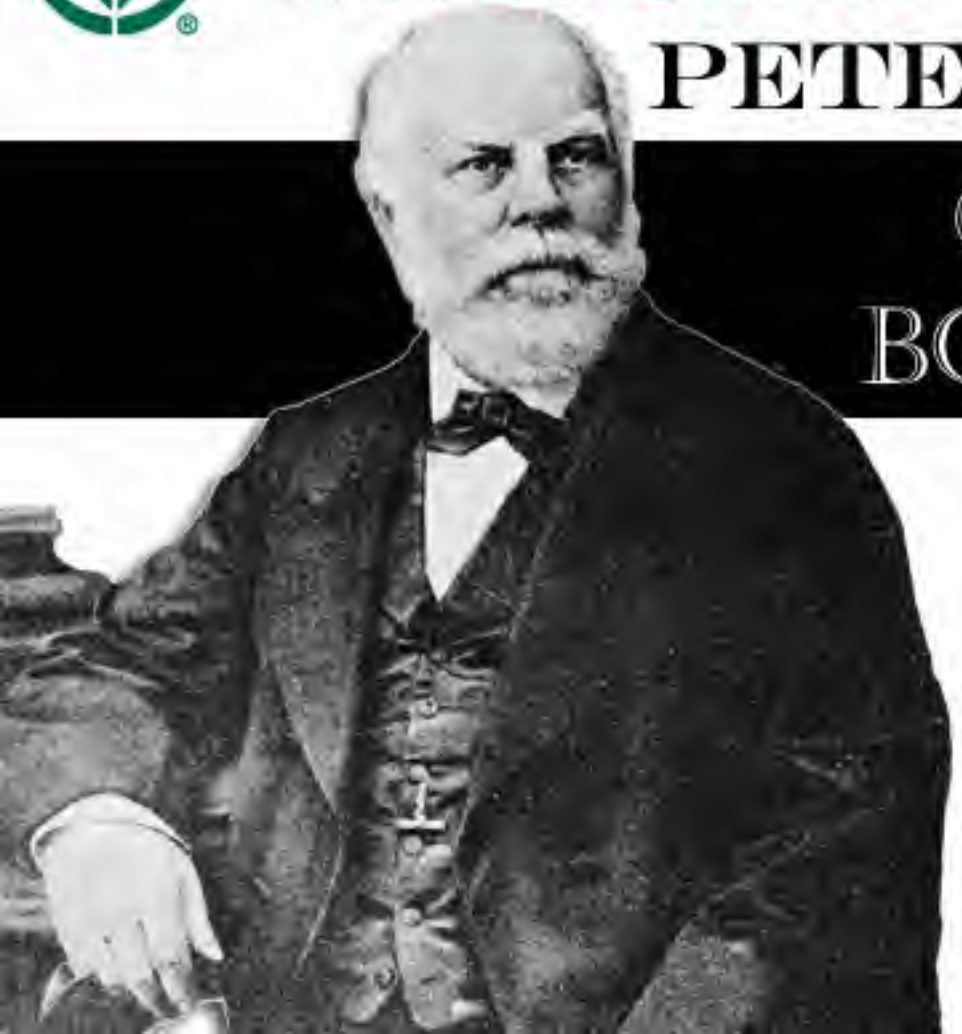

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Lepto caulis Torr & Gr. in Hb Durand

30 L. ~~Buckleyi~~ (S. filipendulus Buckley in Proc. Acad Phila 1862 p. 8.) ~~L. leptocaulis Torr & Gr. in~~ caulis caespitosus, erectus (spithameus), pedalis, gracilis compressiusculus, fistulosus, foliosus; folia plana, caule brevioribus; capitula subsingula (1-3) ~~in 8 flora~~ spathae per aequatibus 3-6 flora; involucri ovati aristati, flores ~~subpedicellata~~ plerumque brevioribus; sepalis ovato lanceolatis acuminatis aristatis ~~subulatis~~ aequalibus seu exterioribus paulo brevioribus, stamina 3-6 et capsulae obovatae trisperae retusae mucronatae. Flores stigmatibus expansis obovatis cristatis perbrevi aequantibus indeq; oblongo linearibus quarta parte superantibus, antheris filamento brevioribus, semiovatis apiculatis, costato-lineolatis.

Western Texas, Lindheimer Wright, Buckley; Arkansas Leavenworth. — The very gracile white flat light grass green stems, 6 or 8 to 12 or 14 inches high, grow in dense tufts for an apparently perennial rhizome; the flower a single head, rarely 2 or 3 (the secondary pedunculate heads); heads in fruit 4-5 lines in diameter, consisting of 3-6 or 7, usually about 5, light green flowers; flowers not quite 2½ lines long, remarkable for the elongated sharp points of the sepals and the irregular number of stamens; ~~there I have found~~ ~~the 3 or~~ 2 rotes only 3, often 4 or 5, very rarely 6, and then always some of the inner ones depauperate, with very long and slender filaments but extremely small anthers; rarely occasionally the anthers of the external stamens are nearly as long as the filament; the only species in which I have noticed such an irregularity. — Seeds very similar to those of L. magicaulis, 0.22 l. long, with about 6 strong and dark ribs visible on one side.

Buckley.

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31 J. marginatus Rostk. Mon. 38 t. 2 f. 2. A well known species, which grows all over the Eastern and Interior States as far as woodlands extend, and down to Texas, but has not been found in the western plains or on the Pacific Slope. It is distinguished from all our other species by its 3 purple or dusky red-brown anthers, which usually exceed the external sepals, and are turned outwards at maturity of fruit; ~~Different var. the~~ is further distinguished by the ~~external~~ outer sepals being much shorter than the ~~external~~ inner, obtuse or mucronate ones. The ovate obtuse ovary with almost sessile enclosed stigmas of the same length as the subglobose obtuse short mucronate capsule. I find the seeds quite variable in size and form; they are always strongly apiculate, or almost caudate, and strongly ribbed, with few 4 or 5 or at most 6 ribs visible on one side, ~~crowded~~ lunulate or rarely reticulate; ~~their not fan is low~~ they are ~~usu~~ usually slender lanceolate or obliquely fusiform, but in Lindh. Herb. Fox exsicc. 193, which ~~was~~ had been named J. heterandrus they are very short ~~and thick~~, ovate, obtuse, abruptly apiculate; their length varying from 0.22 to 0.33 and their thickness from 1/4 to 1/2 their length. J. aristulatus Michx 1.191 or aristatus Pers syn. 1.385 is exactly the same plant; J. biflorus Ell. Bot. 1.407 and J. heterandrus Nutt. N. A. F. in Trans Am Phil Soc. v. 153. are ~~fewer~~ forms of the same with 2 or 3 flowers only in the head. J. cylindricus Curtis Sill Journ. 44 p. 83, Steud Glum 2.304 is a form with heads elongated into spikes of 6 lobes by 3 l. in diameter, sterile below; only the uppermost flowers being fruit; the ~~extended~~ outer sepals are almost as long as the inner ones, the stamens shorter and the anthers oval and very small.

X Stalk bracts and the inner as Elliott says, but, all the forms of this sp. have the outer sepals shorter.

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~~but~~ ~~they~~ distinguish a few flowered form var. biflora with a drooping panicle (2-3) & flat flowered heads more outward; 1½-3 feet high
The ordinary form, with compact or drooped panicle & larger heads, which has usual 5-8 flowers; together & ~~the~~ with shorter stems (1-1½ feet high) & fewer (2-6 or 8) larger heads, ~~with~~ (8-12 flowered heads; all these forms run into one another.

α. vulgaris — the common form everywhere

β. biflora — from Delaware (~~Wilmington~~) to Texas

γ. paucicapitata — Long Island, South New Jersey, Short Hills, Indianapolis

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33. J. articulatus, Lin. or that form of the Linnean species which had been distinguished as J. lamprocarpus, Ehrh. and which is common in northern Europe, has a very limited range in ~~North~~ America; all the specimens I have seen come from the New England states (Boston, Pickering Amherst, Tuckerman, and Providence and Nantucket, Olney) and from Western New York (Penn Yan, Sartwell) Vittaya and New foundland. — Stem, densely tufted, erect, about a foot high; panicle spreading, with usually short, diffuse, dark colored, usually equal, or inner ones slightly longer; lanceolate acute and mucronate, or inner ones ~~slightly~~ obtuse ~~and mucronate~~; stamens about two thirds the length of the sepals and anthers as long as filament, ovary acuminate, terminating in a ~~short~~ style about half its length; capsule longer than the sepals, acute or even rostrate, (in Southern Europe not in America specimens) rarely shorter, obtuse and mucronate. — Seed obovate, obtuse at the apex, acute at the base and at both strongly apiculate, 7 or 8 ribs visible, reticulate, with areae finely cross lineolate; 0.3 l. long or a little less, and about half as much in diameter

Th. Pap

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3b. L. alpinus Willd. (L. fuscovater Schreb.,
L. affinis R. Brown. L. Richardsonianus Roem. & Schult.
L. pilosiusculus Pursh. pluv. L. articulatus var. pilosiusculus
Gray Man. ed. 2. 482. L. elongatus Vasey in Herb.
This form ought perhaps not be separated from L. articulatus
with which now L. Lamii comprises both this and the last
but with us it is easily distinguished and occupies
a distinct geographical range; for keep the
separate for the present, and leave the final decision of the
~~keep it~~ botanists
of Europe, where both forms are much more abundant.

Stems erect from a creeping rootstock, 10–16 inches high
~~(except in extreme north forms)~~; branches of the meagre
panicle strictly erect and much elongated, green and
light brown; sepals oblong-obtuse, ~~equal~~ or outer one
minutest and respect, equal or exceeding the rounded
ones; ~~capsule~~ stamens same as last; capsule very short with very short style
as long or a little longer than sepals, obtuse, minutely
semi-trilocular; seeds ~~#~~ oblong-elliptic, rarely obovate,
with a ~~blunt~~ obtuse apiculus, 0.30–0.35 l. long;
~~#~~ very similar to last, but usually more slender —

The real alpine form of Willdenow, which is ~~at the~~
same as the plant from the Arctic coast, is only a
few inches high, bears very few dark brown heads in
the panicle and has the slenderest and longest seeds.

Our American plant is distinguished from the German
by its lower stems and paler flowers and fruit.
Fries has set ~~the~~ absolutely the same from Sweden
formerly as L. sylvaticus, and as L. aculiflorus, later as
L. alpinus var. vestigiis. —

With us this species is confined to the
northwestern parts of the Continent, from Sonora
and Ontario lakes, ~~south~~ its most southern locality
Sartwell,

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where it meets the east f. articulatus, northward to the Hudsonby region, and the Arctic shores and westward along the great lakes, to northwestern Iowa, & the upper platte (Hayden, Colorado Hall & Harb 5-58) and beyond the Rocky Mts towards Fort Colville. Lyall,

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35. *L. militaris* Bigelow, Flor. Bost. ed. 2 (1824) p. 139.
"discovered by Mr Greene at Tewksbury" and since found.
from Maine, Massachusetts, Connecticut, Rhode Island to the Potomac Mts & Penn
(J. Green, New Jersey; C. F. Parker, Maryland; A Conway,
and if there is no error in the label, even in Alabama
(Drummond). —

The ~~plant is~~ stout (2–3¾ feet high ~~plant~~ stem spring
from a creeping ~~thick~~ rootstock and are ½ to ¾ in
well marked by its single very long leaf, which
usually ~~exceeds~~ overtopping the inflorescence, and is usually
followed by a second one, which is reduced to a mere
sheath. The decurrent with many with the crowded
commonly sessile exact contracted flowers, in 2–5,
usually about 3, inches long; the heads usually 5–12 flowered,
but, in a Maryland specimen 15–25 flowered, flowers
¾ in lines long, sepals lanceolate ~~exterior~~ outer ones
subulate and even acicular, usually very little shorter than
the acute inner ones; stamens 6, two thirds as long as sepals,
linear anthers a little longer the filaments;
stigmas exert, as long as the ovate acuminate ovary
together with the (style distinct), axial; capsule
sharply triangular ovate, (rostrate acuminate), equally
or slightly exceeding the sepals, one celled; seeds
obovate oblong usually ~~large~~ & thick, very slightly angulate 0.25–0.30 l. long and
⅓ as ~~as thick~~ of the length; distinctly reticulate, with few longitudinal
lines; ~~with meshes~~ 8–10 ribs visible; the areas nearly naked.

Dr Robbins sends a curious form from
Roxbury & Uxbridge where it grows in streams
Mass. with an immense number
of hair like floating leaves 1 or 1½ foot long, from the
older parts of the horizontal rhizome, apparently the base of the decayed
stems of last year, — ~~It might bear the designation~~
~~of R. var. capillifolius.~~

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36 S. Elliottii; Chapman H. South. States 494.

Caulibus caespitosis erectis, foliis tenuissime longe exsertis (1–2 pedalibus) simplice vel plerumque ramosis; paniculae compositae subpatentes; capitulis B–9 floris globulosis; sepalis late ovatis acutiusculis ~~subulatis~~ aequalibus; staminum B et ovarii ~~ovato obtusa~~ ~~stigmata~~ ei aequilonga inclusa; testis parte superiore capsulam late ovatam obtusam brevissime ~~apiculatam~~ mucronulatam fere aequantibus; ~~atrofuscum, lucide~~ ; antheris linearibus filamentis vix longioribus, ovario ~~obtuse~~ late obtuso stigmatibus subsessilibus fere aequilongum. Semibus oblanceolatis, fusiformibus utrinque attenuatis, ~~nitidis~~ fuscis, aureis lacunosis ~~reticulatis~~, —

From South Carolina, Ravenel, Beyrich (sub nom. J. acuminata) to Florida Chapman, and Alabama, Sullivant? — ~~Elliottii~~ is ~~rare~~ a few slender stems springing from a short stem which bears numerous long fibrous scales; panicle compound or decompound, 3 to 4 inches long with few principal branches; ~~the~~ heads obtuse (from the broad blunt caps) 2 or 2½ lines in diameter; ~~sepals very acute, flower greenish~~ 1.0–1.2 l. long. Color brown; capsule as long or scarcely longer than the sepals, usually very dark colored and shining, sometimes pale; seeds at once distinguished by their dark color and slender form; usually 0.23 – 0.27 l. long, and nearly as much in diameter; ~~striate~~; 5 or 6 ribs quite conspicuous, even of the fully ripe seeds quite smooth. — The dark colored slender form and above all the small obtuse heads and dark seeds distinguish this plant at once. But Chapman's specimen is other plants ~~this~~ Elliott's description ~~seems to me~~ doubtful; as Elliott's description is insufficient, it belongs perhaps to the next species.

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37. J. pallescens Lam Enc. 3. 268. caulibus caespitosis plurim erectis sem vel decumbentibus parcide effusa decompositis floribus capitula parvi vel multiflora, pallide sepalis lanceolatis subobtusis acutiusculis, petalis subaequalibus, staminibus dimidio s. tertia parte superantibus, antheris polentiplenque brevioribus; ovario ovato oblongo stigmatibus sessilibus s. ovario ovato obtuso s. saepius acutato subbrevioribus inclusis; capsula (pallida) prismatica mucronata s. acutata, unilocularis sepala aequantia s. excedente. semibus parvis pallidis obovatis sublaevibus utrinque acutis, areis lineolatis reticulatis. —

Var α. J. debilis: caulibus erectis s. decumbentibus radicantibus ve, debilibus (spithamaeis sesquipedalibus debilibus) capitulis parvis (3–6) floris; floribus mucronatis, capsulis ~~exsertis~~ acutis brevioribus mucronatis exsertis. — J. acuta Michx I. 192 ~~J. debilis~~, DeCandolle 136, Kunth 3. 335, Elliott I. 409; non Gray de Amer. an. plant. J. debilis Gray Man. ed. 2. 481

Var β. diffusissima: caulibus erectis 2–3 pedalibus parcidae ~~vel~~ plus ultra quam decompositis, ramis numerosissimis foliformibus elongatis; capitulis 2–7 floris pallidis; sepalis angustioribus, stamina fere diplo superantibus, ovario acuteto ~~stamil~~ stigmatibus longioribus; capsula liberi lanceolata acuta, calyce prop duplo superante. J. diffusissima. Bently & Trim l. c. p. 9. —

Var γ. robustior. caulibus 2½–4 pedalibus ~~robustis~~, erectis foliisque elongatis robustioribus, parcidae ultra decomposita, patulis; capitulis 5–8 floris; stamina pallide fuscis, floribus majoribus, antheris filamentis angustioribus, capsula ovatis oblusis, sepala acutiusculum paulo excedentibus.

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δ. patens: caulis erectis pedalibus bipedalibus ~~debiles~~ gracilibus s. subrobustis; foliis simplicibus s. compositis, ~~diff.~~ petiolis; capitulis diu s. multifloris, ~~dilute~~ ~~straminea~~ fuscis; floribus majoribus, sepalis aequalibus s. raro exterioribus paulo longioribus; capsulae pubescentia ~~obtusiusculae~~ ~~abrupte~~ mucronatae aequilibres, nervis ei brevioribus, antheris filamento multo brevioribus; ovario ovato acuto. – J. pendexus L. Mey. Gen. Junc. p. 30 J. patens Kunth Enum. 3. 340. –

All over the Eastern and middle states from Massachusetts (to the Rio Grande and Michigan) and westward to Missouri and west Texas; var α. I have seen only from Pennsylvania, Schweinitz, Moser, Porter, Ohio, Lea, Kentucky, Short (of Gray's original J. debilis) Mississippi, E. Hilgard, S. Carolina, Ravenel, but it is probably more extensively distributed; var β. Northwestern Texas, Buckley; var γ. Mississippi Valley, Illinois, Geyer, Mead, Vasey, Engelmann, Missouri, Engelmann, to Louisiana, J. Hale; var δ. the most common and ordinary form, from Massachusetts, to Michigan, Illinois and Missouri, and southward to Florida, the Rio Grande and west Texas, ~~apparently~~

p. 66. This is one of our most variable plants, ~~species~~, the extreme forms of which are readily taken for distinct species, where the intermediate ones are wanting. I have not yet been able to compare Lamarck's original specimens, but rely on his description, and on that of Meyer who has examined it and declares it identical with Michaux' J. acuminatus Michx, and on Le Harpe's description of the latter which however is not as full as desirable. Both authors had a form with few flowered heads in view,

I. peloraspes

spirit of my old and highly esteemed (now departed) friend, Jacques Gay of Paris.

La Harpe was the first to give full descriptions of these plants and all their organs, and only since the date of his publication we find similar extended accounts, instead of the short diagnoses in Meyen's works, e.g. in the Journal of the Philadelphia Academy, which were published 1847. Having not been able to compare Meyen's original plants, I have relied with confidence on the critical descriptions of ~~the~~ references of La Harpe, especially in regard to J. flexilis, J. occidentalis, and J. polycephalus (J. sphaerocephalus), (where doubts had existed, such as).

The stem is stiff, and slender, often almost filiform, and sends out from one to several more crowded slender stems, of ~~a few inches~~ 18 or 20 inches high; leaves slender, almost setaceous, scarcely compressed, and incompletely ~~sept~~ partitioned knotted; the panicle is very differently developed in different specimens; sometimes ~~incompact~~ it is comparatively small 2 or 3 inches long, and nearly spreading, with more crowded flowers, ~~but~~ mostly (at least in the herbarium specimen examined by me) the panicle is 4 or even 6 inches long, the flowers scattered along the few spreading or recurved branches. Flowers green with a reddish tinge, especially on the inner sepals, usually 1.0 to 1.3 lines long and generally single. Sepals obtuse or sometimes mucronate, the outer ones reddish, the inner generally shorter than these; in a Lake Superior specimen collected by Dr Robbins the flowers are only 0.8 line long and all the sepals equally broadly oval, obtuse. Stamens ~~as long~~ about the length of the outer sepals; anthers always longer than the filament, sometimes twice as long, in others nearly 4 times as long; style not as long as the acuminate ovary; the capsule ought not to have been described as triquetro-ovate, mucronate as Meyen and (copying) after him, La Harpe did, it is, as Gray has it, "tapering", and completely incrassated, the lateral

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placentae ~~occupying~~ only on the lower third or fourth of the ovary. Seeds 0.25 lin long, delicately but distinctly reticulate with transversely elongate areae.

I have already, on page 426 of this volume, ~~spoken of the~~ great morphological importance of this ~~species~~ plant, which connects the one flowered with the head-flowered species, the flower is all of the one lateral really perfect, and shows that there is no other difference between the the that in the former the head is reduced to a single lateral flower, while in the other 2 to an indefinite number are ~~centripetally~~ developed in centripetal order. In our species the second flower is ~~frequently~~ usually undeveloped, but its place is occupied by a bud, which often and especially later in the season is developed into a leafy expansion, sometimes the first flower ~~is already~~ is replaced by a leaf bud, and in rare instances a leafbud makes its appearance between the flowers. I have never seen more than two flowers, nor more than one leafbud in a head. Botanists who have the opportunity, ought to investigate the variations ~~of~~ in the inflorescence of this plant, and accordingly locality, season, and other circumstances.

6 I can not distinguish Dr Chapman's I. abortivus from the northern plant, ~~and its~~ except by its remarkably thick rhizome and its stouter stems and leaves; the flowers are absolutely identical and fruit I have not seen.

With some hesitation I add as a probable and radical variety or form of I. scabilis, which does not seem to exist in American herbaria; Lehmann who has seen it in (Mishe of Hort.) gives a full description, the essential parts of which are republished above. The flowers are drawn as equally like those of I. peloropus, and there is nothing in them that would distinguish it ~~essentially~~ absolutely from peloropus but the ~~terminal flower~~ smaller number of stamens, notwithstanding the different habit, and that alone would not be sufficient; ahead of the ~~two~~ flowers terminates fruit I seed is unknown; the flowers terminate the branches, or evidently an extremely depauperate inflorescence. Hooker, H. Bor. A. 2. 191 refers it to I. ciliatus which within is synonymous with I. calcicola — but that is also a Canadian species.

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(1823)

32. J. pelocarpus E. Mey Lyn Lugel p. 30. La Harpe Mong

124 Kunth En. 3.333 non ~~Gray, Man. et~~ auct. Amer.

rhizomate horizontali, ~~filiforme~~ tenui pallido; caulibus ~~erectis~~ (spithameis, ~~sesquipedalibus~~ vel ulterioribus) erectis, tertiusculis, parcifoliis; foliis tertiusculis indistincte nodulosis; pedunculis ~~plus~~ laxa ramis plerumque elongatis, sed floribus ~~vel deorsum~~ dispositis ~~singulis~~ binisve saepe in gemmam vel ramulum foliosum ~~floribus (parvis)~~ abortivis [gemma vel ramulo foliioso saepe florum loco terminali] sepalis oblongis obtusis extimis plerumque brevioribus stamina 6 et ovarium acuminatum cum stylo brevissimo vix superantibus; antheris late oblongis filamentis multo ~~longis~~ (duplo quadruplo) longioribus; ~~stigmatibus exsertis~~; capsula trigona ~~[illegible]~~ sessilis ~~ovata~~ 1 locularis exserta; seminibus obovatis brevissime apiculatis, ~~utrinque~~ alveolatis, ~~utrinque~~ alatis. J. Muhlenbergii Spr. Syst. 2. 106. (1825)

~~Var. β. crassicaulex~~: J. vivipara Comm. Jour. Acad. Phil. 1 p. 105 (vide) J. Conradi Tucker in Torr. Fl. N.Y. 2. 328 (1843) (J. spuriflorus Bertoni in herb. Gray man ed 2. 482. Chap. Fl. 495)

Var. β. crassicaulex: ~~caudice~~ e rhizomate crasso caulibus plurimis robustioribus.

J. abortivus Chap. Flor. South. States p. 495.

Var. γ. subtilis, caule plerumque sesquipedali vel foliioso ex axillis foliis ex axillis solitariis brevibus proliferis; floribus ~~perpaucis~~ sublimis Triandris. J. planitarius Nuttall Gen. Flor. 1. 191. J. subtilis E. Mey. Syn. Lug. p. 31.

La Harpe Mon p. 135:—

From New Brunswick and westward Canada east to Lake Superior, ~~&c~~ and along southward, chiefly along the coast, to Florida; var. β. in Florida, γ. which I have only seen myself, ~~&c~~ streams in Canada. — A very peculiar and morphologically very important plant, the identity of which has been long very ~~doubtful~~ obscure. Meyer's

2/ original ~~description~~ description is not full enough, not to admit strong doubts about its identity; but La Harpe, who wrote only two years after Meyen's publication of the species, and who seems to have been well acquainted with Meyen's specimens personally, gives a full description which can leave no doubt, even if Meyen's Herbarium did not settle ~~all doubts~~ the difficulty. Though ~~the original specimens are~~ originally the species was described from Sprengel's Herbarium, which are no doubt also the originals of his J. Mühlenbergii, ~~and~~ (not probably obtained from Mühlenberg) several species of our plant, received later from different sources (e.g. E. Tuckerman & A. Gray) are still preserved in the ~~Meyenian~~ his Herbarium and others, named by him and in his own handwriting are in the Royal Herb at Berlin. ~~Now, whoever~~ ~~has seen~~ Now, this plant is so peculiar that H and his unfortunate companion of the species with J. Campanulatus and pandurus, "ex ipsis habitum repert" necessarily thought our botanists on the wrong track;

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anyone who has ever seen or examined it, will confound it with any other; is it then at all probable that Meyen himself should ~~have~~ ~~original~~ in his own Herbarium ~~confounded~~ ~~placed~~ ~~a wrong species~~ have mixed up different species? His original specimens may not exhibit the ~~abortive~~ ~~flowers~~ pubescent exserted, but that he did not mention the ~~this~~ as he did allude to them in the account he gave of his J. pandurus; ~~but La Harpe~~ and he does even mention the number of flowers, ~~but La Harpe speaks~~ ~~of the "flores subbini" and~~

note

~~La Harpe's~~ Jean de La Harpe's Monographie des Orchis Indigènes; ~~was published~~ seems to be little accessible to botanists; it was published 1825 in the 3d Vol of the Mémoires de la Société d'Histoire naturelle de Paris, pag. 89 – 181, and proves to be a work of careful ~~critical~~ research in which I believe I can trace the hand and the critical

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July 1866

31. b. P. biformis: (caule annuus) brevissimo foliioso ramoso ~~ramosissimus~~ (1–2 pollicaris) in capitulos pedunculos capillares stipiformes numerosos digerente; foliis parvis supra canescentibus apice versus planum & longe excedentibus; floribus paucis capitellatis sæpe singulis; sepalis lanceolatis ~~subulatis~~ acuminatis; extimis subulatis, dimidio capitulum longitudine; ~~stamina~~ numero sepalorum sæpe duplo; sepalis dimidio vix superantibus; antheris oblongis filamento subduplo brevioribus; ~~ovario ovato stylo~~ stigmatibus cum stylo perbrevi ovario ovato æqualibus indeciso: capsula sem. in ~~[illegible]~~ obovatis obliquis brevius apiculatis, tenuiter transverse striatis.

~~La Sandy soil Meadow Co Cal. Bolander~~

α. capitellatus; ~~plantis~~ major, floribus 2–3 in capitulo 3 mericis (sepalis 6, stam. capillaribus 3)

β. uniflorus – minor, floribus singulis 2 mericis (sepalis 4 stam. capillaribus 2). – J. saginoides Lag. sup. p. 436

La Sandy soil, Meadow Co Cal. Bolander

both forms; var β. also in the Siem Mountains, among mosses, Hellebrand. –

~~Of this sin~~ Only the second ~~form~~ variety of this curious species was known to me, when ~~I wrote it the type~~ I published the first part of this paper. I then considered it as the type of a distinct subgenus, allied by its single flowers to Juncoides ~~or flowers stem~~ through Juncoides, and distinguishable by ~~the~~ its dimerous ~~flowers~~ from any other known Juncus (see pp. 426 & 428.). During the past spring, however, Mr Bolander has succeeded in discovering the trimerous form, which ~~at the same time~~ also bears 2 or 3 flowered heads, thus assimilating our plant to the ordinary form of Juncus, and especially to the European J. capitatus, and

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I can now not doubt, that destroying Juncoides. It must be placed with its European ally among the sections Francinei, ~~between~~ I.t near I. marginatus, the dimerous ~~variety~~ forming initially an anomaly, not otherwise observed in this genus, but again found among Restiaceae and Endocaulaceae where Dimerism & Trimerism occurs in the same genus, whether in the same species, I know not. —

~~The~~ both forms of the Cattleplant leaves are 2–10 lines in length, filiform but never thicker fleshy, strongly grooved above and chocolate colour, and upwards flattened; the stems or, more properly, peduncles axillary with 1 or 2 leaves at their base, naked upwards, bearing there apex 1–3 flowers in the axils of membranous bracts, ~~that~~ not half as long as the sepals; flowers 1¼–1½ l. in long, sepals green, with red, outwards very sharp pointed, inwards with broader; seeds 0.28 l. long, the length being equal to 1½ or 1¾ diameters; 4 or 5 very fine ribs are visible, and between them a delicate cross lineation.

Var. α is a little larger in all its parts, bracts and flowers included; the two flowered head are arranged exactly like those of I. pelocarpus, with 2 bracts being the flowers in the axils and a third stemless one at the inner base of the inner flowers. Var. β is a little smaller, 1/4 to 1/2 inch high; the single flowers have two bracts at their base, just like the single flowered Juncoides; alternating with the ~~I find the~~ we find the external sepals, the stamens and the (stigmata carpels?), and opposite to it the inner sepals, and the valves.

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

Remarkable — brown flowered variety — the Mono

Diac: J. ~~Ethiopicus~~ debotrys near the mouth of the Delaware, Leidy & Cogswell

in Delaware — I. pelocarpus the St Peters River, Minnesota; Pony

I. alpinus, Ashoosk Falls, Vermont. Robbins. — Dr Torrey

has sit fr ~~[illegible]~~ sphagnous swamps near Manchester, I. filiformis var. paradoxus Hooker